

# Notice of Allowability

Application No.

09/687,244

Examiner

LeChi Truong

Applicant(s)

LIN ET AL.

Art Unit

2194

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 03/16/2006.
2. ☒ The allowed claim(s) is/are 1, 2, 7, 13-16 now renumbered as claims 1-7.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**WILLIAM THOMSON**  
**SUPERVISORY PATENT EXAMINER**

### **DETAILED ACTION**

1. This is in responding to the amendment filed 03/13/2006.

#### ***Allowable Subject Matter***

2. Claims 1-2, 7, 13-15, 16 are allowed.
3. The following is an examiner's statement of reasons for allowance:

As to claims 1-2, 7, 13-15, 16, the prior art as taught by McCarty et al (US. Patent 5,954,796) and Stone (US. Patent 5,784,555) do not teach on render obvious the limitations recited in claims 1, 7, 16, when taken in the context of the claims as a whole, the FCHIM being capable of receiving the modification request, the FCHIM being capable of altering the functionality of the Fibre Channel controller based on the Fibre Channel attribute value, the FCHIM being capable of receiving the operating system independent commands and providing control signals to a Fibre Channel controller as recited in the independent claims 1, 7 and 16. Moreover, evidence for modifying the prior art teachings by one of ordinary skill level in the art was not uncovered so as to result in the invention as recited in claims 1, 7 and 16.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

March 20, 2006

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER

### **Examiner's Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Gina A. Bibby (Registration number: 57,407) on 3/21/2006.

3. Amend the following claims:

Claim 1: A computer implemented method for facilitating communication with a Fibre Channel controller, comprising the operations of:

defining a data structure having a Fibre Channel attribute value, wherein the Fibre Channel attribute value defines a functionality of a Fibre Channel controller;

enabling user modification of the Fibre Channel attribute value;

defining a Fibre Channel Hardware Interface Module (FCHIM);

receiving a modification request from a code segment to alter the Fibre Channel attribute value during operation of the Fibre Channel controller such that the code segment is configured to directly alter the Fibre Channel attribute value without translating the modification request into Fibre Channel commands to facilitate the alteration of the Fibre Channel attribute value, the code segment is an Operating System Module (OSM), the OSM being capable of providing the modification request, the FCHIM being capable of receiving the modification request; and

altering the functionality of the Fibre Channel controller based on the Fibre Channel attribute value, the FCHIM being capable of altering the functionality of the Fibre Channel controller based on the Fibre Channel attribute value.

Claim 2 : A method as recited in claim 1, further comprising the operation of modifying the Fibre Channel attribute value in response to receiving the modification request.

Claim 3 (Canceled)

Claim 4 (Canceled)

Claim 5 (Canceled)

Claim 6 (Canceled)

Claim 7 : A profile data structure for facilitating communication with a Fibre Channel controller, the profile data structure executed by a computer, the profile data structure comprising:

a Fibre Channel value field; and

a data type value related to the Fibre Channel value field, the data type value defining the data type of the Fibre Channel value field,

wherein a value in the Fibre Channel value field is accessible by an operating system dependent code module and the operating system dependent code module is configured to directly access the value in the Fibre Channel value field without translation into Fibre Channel commands, the operating system dependent code module is an Operating System Module (OSM), the OSM being capable of receiving operating system specific commands and providing operating system independent commands, and

wherein the value in the Fibre Channel value field also is accessible by an operating system independent code module, wherein the operating system independent code module is a Fibre Channel Hardware Interface Module (FCHIM), the FCHIM being capable of receiving the operating system independent commands and providing control signals to a Fibre Channel controller, wherein the FCHIM alters the Fibre Channel controller based on the value in the Fibre Channel value field.

Claim 8 (Canceled)

Claim 9 (Canceled)

Claim 10 (Canceled)

Claim 11 (Canceled)

Claim 12 (Canceled)

Claim 13 (Original): A profile data structure as recited in claim 7, wherein the Fibre Channel attribute value field relates to a Fibre Channel maximum port value.

Claim 14 (Original): A profile data structure as recited in claim 7, wherein the Fibre Channel attribute value field relates to a Fibre Channel maximum Logical Unit Number (LUN) value.

Claim 15 (Original): A profile data structure as recited in claim 7, wherein the Fibre Channel attribute value field relates to a Fibre Channel Arbitrated Loop value.

Claim 16: A computer system for facilitating communication with a Fibre Channel controller, comprising:

a profile data structure executed by the computer, the profile data structure having a Fibre Channel field value;

an operating system dependent code module executed by the computer, the operating system dependent code module in communication with the profile data structure, such that the operating system dependent code module is configured to be capable of directly modifying the Fibre Channel Field value without translation into Fibre Channel commands to facilitate the modification, wherein the operating system dependent code module is an Operating System Module (OSM), the OSM being capable of receiving operating system specific commands and providing operating system independent commands; and

an operating system independent code module executed by the computer, the operating system independent code module in communication with the profile data structure, wherein the operating system independent code module is capable of altering the functionality of a Fibre Channel controller based on the Fibre Channel field value, wherein the operating system independent code module is a Fibre Channel Hardware Interface Module (FCHIM), the FCHIM being capable of receiving the operating system independent commands and providing control signals to a Fibre Channel controller.

Claim 17 (Canceled)

Claim 18 (Canceled)

Claim 19 (Canceled)

Claim 20 (Canceled)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

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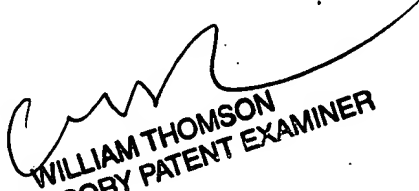


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LeChi Truong

March 20, 2006

  
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